

gratory influence which impels the young to wander southwards at the approach of winter.

In presenting to the readers of 'The Ibis' all the information which I have been able to collect with reference to this rare and interesting bird, I must take the opportunity of expressing my obligations to Mr. G. R. Gray for the kind assistance which I have received from him; and in acknowledging the use which he has accorded me of all the specimens of *E. asiaticus* and *E. veredus* in the British Museum, I am glad to be able to add that he recognizes the result of my labours, and agrees with me in considering *Eudromias veredus* to be a good species.

XVI.—On the Oriolidæ of the Ethiopian Region.

By R. B. SHARPE, F.L.S.

(Plates VII., VIII.)

THE following sketch of the Orioles of Africa has been suggested to me during a recent study of the species in my collection; and as my series is extensive, I trust I may be able to throw some light upon the synonymy of the different species, some of which are involved in considerable obscurity. Mr. Gray's 'Hand-list of Birds' indicates ten species of African *Oriolidæ* as having been distinguished by modern authors. This is very nearly correct; but he has omitted *Oriolus crassirostris*, Hartl., apparently a very good species, and he has included *O. moloxita*, Rüpp., as distinct from *O. monacha* (Gmel.), to which I think it may be undoubtedly referred.

I am by no means certain that the results arrived at in the present paper will be acquiesced in by all ornithologists; but I have done the best with the material at my command, and I can only regret that so few of the specimens examined by me have had the sexes accurately determined by collectors. In birds which vary so much as Orioles in passing from the young to the adult stages it is a matter of great importance to know the sexes of specimens; and if collectors would only think of the additional value which information on this point confers on their treasures,

they would, I feel sure, more often append a short note, instead of being satisfied with the mere preservation of the skin.

I have adhered in the present essay to the same form of diagnostic table as in my former contributions, notwithstanding that I have received from a few ornithologists sundry objections to this way of distinguishing species. But, in my opinion, it is the very best way of submitting them to a crucial test, as it exacts the definition of some tangible character by which the species may be distinguished from all others; and this style of diagnosis is particularly applicable in the case of African birds, where often so many races of the same bird exist, differing in nothing but size, races which can only be distinguished as *major* and *minor*. These species cannot be shown in a diagnostic table, and are at once resolved into their position of larger and smaller races of the same species, which I believe to be their proper status in the ornithological system.

As far as I can perceive, there are *nine* species of *Oriolidæ* inhabiting the Ethiopian Region; and they are all referable to the genus *Oriolus**. Of these I have examined all but one, namely *O. crassirostris*, Hartl., which is only known by the type in the Bremen Museum. Dr. Finsch, however, has most kindly sent me a description of the bird, and added at the same time some valuable notes, to which I shall refer in the body of the paper. I am greatly indebted to Lord Walden and Mr. Blanford for the loan of specimens, and to Mr. Gray for allowing me free opportunities of examining the species in the British Museum.

The African *Oriolidæ* may be divided into two sections:—(1) with the head black—*Baruffius*, Bp.; and (2) with the head orange—*Oriolus*, L. No difference in structure can be found between the types of these two groups; and the so-called genus *Baruffius* is evidently one of those which were so often established by its author on a difference of plumage alone. The following diagnostic table may be of use in determining the various species of African Orioles:—

* The genus *Oriolia*, Isid. Geoffr. (*cf.* Hartl. Orn. Madag. p. 43) is founded on *Oriolia bernieri*, which is said by Prof. Schlegel to be an *Artamia*, and is figured as *A. bernieri* (Faun. Madag. Ois. p. 86, pl. 25) from the original specimen in the Paris Museum.

- a. pileo aureo,*
a'. rectricibus externis ad basin nigris,
a''. tectricibus alarum nigris 1. *galbula.*
b'. tectricibus alarum nigris, late flavo mar-
ginatis 2. *auratus.*
b'. rectricibus externis omnino aureis 3. *notatus.*
- b. pileo nigro,*
a'. speculo alari albo,
a''. rectricibus externis omnino flavis 4. *monacha.*
b'. rectricibus externis ad basin nigris,
a''' . rostro robustissimo 5. *crassirostris.*
b''' . rostro gracili,
a''' . major: supra læte olivascenti-aureus 6. *larvatus.*
b''' . conspicue minor: supra saturate oli-
vaceus 7. *brachyrhynchus.*
b'. speculo alari albo nullo 8. *nigripennis.*

1. ORIOLOUS GALBULA.

Oriolus galbula, Linn.: Rüpp. Syst. Übers. p. 61 (1845): Hartl. Orn. Westafr. p. 80 (1857): Heugl. Ibis, 1859, p. 341; Peterm. Geograph. Mittheil. 1861, p. 23; J. f. O. 1861, p. 163; Orn. N.-O. Afr. i. p. 400: Hartl. Faun. Madag. p. 43 (1861): Gurney, Ibis, 1865, p. 268: Schl. Mus. P.-B. *Coraces*, p. 99 (1867): Layard, B. S. Afr. p. 135. (1867): Heugl. J. f. O. 1868, p. 323: Chapman, Trav. S. Africa, ii. p. 397 (1868): Gray, Hand-l. B. p. 291 (1869).

O. pileo aureo: rectricibus externis ad basin nigris: tectricibus alarum nigris.

Hab. in Europâ, et in totâ regione Æthiopicâ.

Adult male. Above rich golden-yellow: wing-coverts black, the cubital coverts with a narrow tip of yellow; primary coverts black, broadly edged with yellow, forming a conspicuous spot; quills black, lighter underneath, the secondaries edged towards the tip with yellowish-white; tail black, the middle feathers entirely of this colour, with a spot of yellow at the tip, all the other feathers black at the base, yellow towards the tip, the outer feathers having more yellow than black; a spot between the base of the bill and the eye black; entire under surface golden-yellow; bill reddish-brown; feet black. Total length 9 inches, of bill from front 1, from gape 2·2, wing 5·9, tail 3·1, tarsus ·8, middle toe ·7, hind toe ·4.

Adult female. Golden-yellow above, tinged with olive-green; quills and wing-coverts brownish-black tinged with olive-green; tail-feathers marked as in the male, but the feathers olive-green, blackish towards the tip; throat and breast grey, with black stripes; flanks bright yellow, with fainter stripes; loreal spot indistinct, dusky; bill brownish-red; feet black. Total length 9·5 inches, of bill from front 1, from gape 1·2, wing 5·9, tail 3·3, tarsus ·8, middle toe ·7, hind toe ·4.

Europe; North-Eastern Africa (*Heuglin*); Western Africa, Casamanze (*Verreaux*); Natal (*Ayres*); Damara Land (*Andersson*, *Chapman*); Madagascar (*Hartlaub*).

I have, of course, not entered every bibliographical reference to the present bird in the list above given, but have selected those only which bear upon its occurrence in the Ethiopian region. The descriptions above given are those of a fine pair shot near Paris by Mr. Harting on the 1st of June 1868. Another bird in my collection, shot by Andersson at Ondonga, in the Ovampo Country, on October 30th, 1866, is lighter underneath, with the black stripes much more distinct. Mr. Andersson has not determined the sex; but it would seem to be a young male, as it agrees very well with another specimen from France, so marked in my collection.

2. ORIOLUS AURATUS.

Le Loriodor, Levaill. Ois. d'Afr. t. 260.

Oriolus auratus, Vieill. N. Dict. d'H. N. xviii. p. 194 (1817): Gal. Ois. t. 83 (1825): Swains. B. W. Afr. ii. p. 33 (1851): Bonap. Consp. Av. i. p. 348 (1850): Cab. Mus. Hein.i. p. 209 (1850): Hartl. Beitr. Orn. Westafr. p. 23 (1852); J. f. O. 1854, p. 24: Müll. J. f. O. 1855, p. 393: Sundev. Crit. Levaill. p. 53 (1857): Antin. Cat. Ucc. Affr. C.-N. p. 44 (1864): Schl. Mus. P.-B. *Coraces*, p. 101 (1867): Hartm. J. f. O. 1867, p. 94: Heugl. J. f. O. 1867, p. 203; J. f. O. 1868, p. 324; Orn. N.-O. Afr. i. p. 401: Gray, Hand-l. B. p. 291 (1869).

Le Lorient bicolor, Temm. Cat. Syst. Cab. d'Orn. pp. 46, 202 (1807).

O. bicolor, Licht. Verz. Doubl. p. 20 (1823): Hartl. Orn. Westafr. p. 80 (1857); J. f. O. 1861, p. 163: Monteiro, P. Z. S. 1865, p. 93.

O. chryseos, Heugl. Syst. Uebers. no. 294; Naumannia, 1857, p. 433.

"*O. icterus*, Pr. Paul Würt. Icon. ined. no. 50" (*teste* Heuglin, J. f. O. 1867, p. 299).

O. capite aureo: rectricibus externis ad basin nigris: tectricibus alarum nigris, late aureo marginatis.

Hab. In Africâ occidentali necnon in Abyssiniâ.

Adult male. Above very rich golden-yellow, a little lighter on the rump; least wing-coverts entirely yellow; lesser wing-coverts black at the base and very broadly edged with yellow, so that the black scarcely shows, the feather nearest the edge of the wing entirely black; primary coverts black, with a few of the smaller feathers tipped with yellow; quills black, light grey underneath—the innermost secondaries broadly, the outer ones more narrowly edged with yellow; primaries with a narrow white edging tinged with yellow; middle tail-feathers black with a yellow tip, the next two on each side black with a little broader edging of yellow, the next feathers for the most part yellow till the last, which are black only at the base; a line of black feathers from the base of the bill to the extremity of the ear-covert, encircling the eye; entire under surface of the body rich golden-yellow; bill brownish-red; feet black. Total length 9 inches, of bill from front 1·1, from gape 1·3, wing 5·5, tail 3·3, tarsus ·75, middle toe ·7, hind toe ·4.

Adult female. Similar to the male, but with the upper surface tinged with olive-green, the rump alone being bright yellow; the quills more dusky-black, and the tail-feathers tinged with olive, where they are black in the adult male; throat and breast whitish, sides of the body, flanks and abdomen yellow, the whole striped with longitudinal lines. Total length 9 inches; bill from front 1·2, from gape 1·35; wing 5·5; tail 3·4; tarsus ·8; middle toe ·7; hind toe ·4.

Young male. Similar to the female, but brighter in colour, the underparts all yellow and the longitudinal stripes more indistinct; bill blackish. Total length 8·5 inches, of bill from front 1·05, from gape 1·3, wing 5·4, tail 2·9, tarsus ·75, middle toe ·75, hind toe ·4.

Senegambia; Casamanze; Bissao (*Verreaux*); Gambia (*mus*).

R. B. S.); Niger (*Thomson*); Angola (*Perrein*); North-eastern Africa (*Heuglin*).

3. *ORIOLOUS NOTATUS*. (Plate VII. fig. 2.)

Oriolus notatus, Peters, J. f. O. 1868, p. 132 : Cab., Van der Deck. Reis., Vögel, iii. p. 33 (1869) : Gray, Hand-l. B. p. 391.

O. auratus, Gurney, P. Z. S. 1864, p. 2 : Andersson, P. Z. S. 1864, p. 6 : Layard, B. S. Afr. p. 135 (1867) : Chapman, Trav. S. Africa, ii. p. 397 (1868) (*nec Vieill. ut suprâ*).

O. anderssoni, Bocage, Jorn. Sc. Lisboa, 1870.

O. capite aureo : rectricibus externis omnino aureis.

Hab. In Africâ meridionali et orientali.

Adult male. Above rich golden-yellow, a little paler on the scapularies; least wing-coverts yellow, with a black shaft down the centre of the feather; cubital coverts black with a broad margin of yellow; primary coverts black at the base, with a yellow edging gradually getting broader towards the tip; quills black, greyish on the underside, secondaries margined with yellow and the outer primaries with white; middle tail-feathers black, with a yellow tip, the two next to the middle tail-feathers black at the base and for the greater part of the inner web, the four outer tail-feathers yellow; a black streak from the base of the bill, passing through the eye and produced to the extremity of the ear-covert; entire under-surface rich golden-yellow; bill brownish-red; feet black. Total length 8 inches, of bill from front 1·1, from gape 1·2, wing 5·4, tail 3·1, tarsus ·8, middle toe ·7, hind toe ·35.

Mozambique (*Peters*); Mombas (*Van der Decken*); Damara and Ovampo Land (*Andersson*); Angola (*Anchieta*).

This very distinct species was described by Professor Peters from a Tette specimen; but, so far as I can see, the Damara bird belongs to the same species. It forms one of the section of the genus *Oriolus* with the head golden-yellow, and is allied to *O. kundoo*, *O. galbula*, and *O. auratus*, from all of which, however, it is at once to be distinguished by the four outer tail-feathers being entirely yellow. From the first two it is also distinguishable by the yellow edging to the wing-coverts, which in those two species are entirely black; and although *O. auratus* approaches

it in also possessing these yellow margins, the colour of the tail at once separates the South-African species.

There can be little doubt that the bird identified by Messrs. Gurney, Andersson, Layard, and Chapman as *Oriolus auratus* is really the present species ; and therefore the following observations refer to it. Andersson (*l.c.*) gives the following note on its habits :—

“ I have only once or twice observed this splendid Oriole in the southern parts of Damara Land—that is, the mature bird. The young (at least I believe it to be the same bird) is pretty common, but only during the rainy season ; for it is migratory. The old bird is extremely shy and wary, and always keeps to the thickest part of the jungle. On and in the neighbourhood of the Okavango River it is, however, more abundant, but still retains its shy habits. In the young bird the iris is brown, legs lead-colour, bill reddish-brown.”

Mr. Chapman (*l.c.*) records both this species and *O. galbula*, and observes :—

“ Both these species are to be met with during the rainy season, but they are chiefly young birds. The adults are rarely met with, and are always excessively wary and shy in their habits, either keeping to the loftiest trees, or the most secluded thickets. At a distance the two species are easily confounded, and the young still more so.”

Mr. Layard (*l.c.*), curiously enough, notices the discrepancy between the birds sent by Andersson from Damara Land and the description given by Dr. Hartlaub of *O. auratus*, but does not describe the South-African bird as new. When first I began to investigate the subject I fully believed that for once Levaillant had told the truth, and that in the present species we had the true *Loriodor* (Ois. d'Afr. t. 260). Levaillant distinctly states that the exterior tail-feathers of this bird were entirely yellow ; and the present species is the only South-African Oriole which I knew to possess this character. But on the other hand Levaillant states that all the outer tail-feathers, except the outermost one, are for the most part black, whereas in *O. notatus* the four exterior rectrices are entirely yellow. The allied Senegambian species, *O. auratus*, agrees exactly with Levaillant's figure

and description, except as regards this outer tail-feather, which has the base black; but this portion of the web is generally covered by the tail-coverts, and requires the attention of a more careful observer than we believe Levaillant to have been, to discover the black colour. I can therefore only follow Prof. Sundevall in considering Levaillant's *Loriodor* nothing more than the Gambian bird; and accordingly Vieillot's name must be employed in preference to that of Lichtenstein.

The description and measurements are taken from an adult male in my own collection from Ondonga, Ovampo-land, sent home by the late Mr. C. J. Andersson. The British Museum also possesses a fine specimen collected at Tette by Livingstone, which, coming from the same locality as the type, may almost be regarded as a typical specimen. I therefore give its dimensions along with those of the Damara bird.

			Long. tot.	Rostr.	Al.
1.	Tette,	Livingstone.	9	1.1	5.5
2.	♂ Ovampo,	Andersson.	8	1.1	5.2

The bird recently described by Prof. Barboza du Bocage (*l. c.*) as *O. anderssoni* is evidently of this species.

4. ORIOLUS MONACHA.

Moloxita ou la Religieuse d'Abyssinie, Montbeillard, Hist. Nat. Ois. iii. p. 405 (1775).

Nun Thrush, Lath. Syn. ii. p. 77 (1785).

Turdus monacha, Gmel. S. N. i. p. 824 (1788): Lath. Ind. Orn. i. p. 357 (1790).

Nun Oriole, Lath. Gen. Hist. B. iii. p. 142 (1822).

Oriolus monacha, Steph. Gen. Zool. xiii. p. 193 (1826).

O. monachus, Cab. Mus. Hein. i. p. 210 (1850): Heugl. J. f. O. 1868, p. 325; Orn. N.-O. Afr. i. p. 402: Gray, Hand-l. B. p. 292 (1869).

O. moloxita, Rüpp. Neue Wirbelth. Vög. p. 29, t. 12. fig. 1 (1835); Syst. Uebers. p. 65 (1845): Gray, Gen. B. i. p. 232 (1845): Bonap. Consp. Av. i. p. 347 (1850): Heugl. Syst. Uebers. p. 31 (1856): Schl. Mus. P.-B. *Coraces*, p. 108 (1867): Gray, Hand-l. B. p. 292 (1869).

O. pileo nigro: speculo alari albo: rectricibus externis omnino flavis.

Hab. in Abyssiniâ.

Head black, as also the entire throat, extending a little way down the breast; upper surface of the body olive-yellow, brighter on the nape, sides of the neck, and rump; wing-coverts olive-yellow, primary coverts black, white at the tip, forming a very distinct white alar speculum; quills black, very light grey on the underside, the inner secondaries olive-yellow on the outer web, the outer ones very light blue-grey; the primaries white on the basal portion of the outer web, and becoming light brown towards the apical portion; tail pure yellow, except the middle feathers, which are olive-green edged and tipped with yellow; under surface of the body bright-golden yellow; bill brownish-red; feet bluish-grey. Total length 9 inches, bill from front .9, from gape 1.1, wing 5.4, tail 3.1, tarsus .8, middle toe .8, hind toe .35.

Abyssinia (Rüppell, Heuglin, Blanford).

There can, I think, be little doubt as to the correctness of the above synonymy; and it must be borne in mind that Gmelin founded his species on the description of the *Moloxita* of Montbeillard (*l. c.*), who in his turn described it from a painting forwarded to him by the celebrated Bruce.

The description is taken from a female specimen very kindly lent me by Mr. Blanford, shot by himself at Antalo.

5. ORIOLUS CRASSIROSTRIS.

Oriolus crassirostris, Hartl. Orn. Westafr. p. 266.

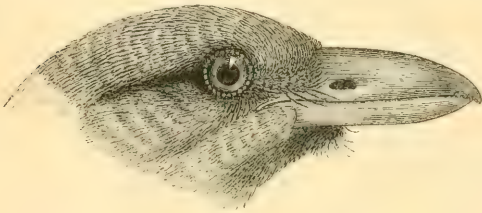
O. pileo nigro: speculo alari albo: rectricibus externis fere nigris: rostro robustissimo.

Hab. in insulâ Africæ occidentalis 'St. Thomas' dictâ (*Weiss, Mus. Brem.*).

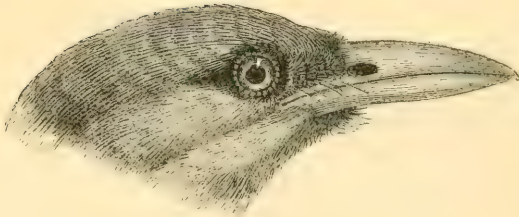
Not having seen a specimen of this bird, I am unable to give a detailed description. I wrote to Dr. Finsch to ask in what respect it differed from *O. larvatus*, and I in due time received an answer, from which I extract the following remarks:—

“*O. crassirostris* is distinguished from its nearest ally *O. larvatus* (1) by the extraordinary thick and broad bill, which resembles that of *Mimeta*; (2) the yellow on the tip of the outermost tail-feather is only 13 lines broad (in *O. larvatus* this colour reaches

nearly to the base) ; (3) the wing-coverts are dark greenish-grey, those on the carpal joint black with dark grey margins. I do not consider the whitish colour of the underparts to be a character, as these parts have evidently been yellow when the bird was alive, and this colour is lost from the specimen having been sent home in spirits. The tips of the tail-feathers and the under tail-coverts are still yellow, although less brilliant. Dr. Hartlaub's description is correct ; but I would add that the whole head, including the nape and the entire throat extending to the upper part of the breast, are black, exactly the same as in *O. larvatus*, the hinder part of the neck and the upper part of the mantle are yellowish-white, the remainder of the upper parts greyish olivaceous-green, the upper tail-coverts more distinct olive-green, like the innermost remiges of the second order, the primary coverts have a broad white apex (as in *O. larvatus* ; *maculâ alari parvâ albâ*, Hartl.). From *O. monacha*, Gm. (= *O. moloxita*, Rüpp.), it is also distinguished at a glance by the different colouring of the tail and by the larger and broader bill.



Oriolus crassirostris.



Oriolus larvatus.



	Long. Al.	Caud.	Rostr. a fr.	Rostr. ad bas.	Tarsi.
<i>O. crassirostris</i>	4" 10" ²	3" 8"	11 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	12"
<i>O. larvatus</i> (S. Africa) . .	5"	3" 3"	11"	4 $\frac{1}{2}$ "	12" "

In addition to the foregoing remarks, Dr. Finsch sent me a sketch of the bill of the type-specimen of *O. crassirostris*, thus enabling me to give a representation of it along with that of *O. larvatus*.

I may add that Mr. Keulemans tells me that he shot a specimen of this fine Oriole in St. Thomas's Island.

6. ORIOLUS LARVATUS.

Le Lorient à masque noir, Temm. Cat. Syst. Cab. d'Orn. pp. 46, 203 (1807).

Oriolus larvatus, Licht. Verz. Doubl. p. 20 (1823): Bonap. Consp. Av. i. p. 347 (1850): Cab. Mus. Hein. i. p. 210 (1850): Hartl. Beitr. Orn. Westafr. p. 23 (1852); J. f. O. 1854, p. 24: Grill, Zool. Anteck. p. 34 (1858): Gurney, Ibis, 1860, p. 209: Monteiro, Ibis, 1862, pp. 335, 341; P. Z. S. 1865, p. 93: Schl. Mus. P.-B. *Coraces*, p. 107 (1867): Hartm. J. f. O. 1867, p. 95: Heugl. *tom. cit.* p. 203: Finsch, *tom. cit.* p. 247: Heugl. *op. cit.* 1869, p. 327; Orn. N.-O. Afr. i. p. 403.

Le Condougnan, Levaill. Ois. d'Afr. pl. 261.

O. condougnan, Temm. Rec. d'Ois. livr. 54 (1825).

O. capensis, Swains. Classif. B. ii. p. 237 (1857); B. W. Afr. ii. p. 37 (1837).

O. melanocephalus, Des Murs, Lefeb. Voy. Abyss., Zool. p. 169 (*nec* Linn.).

O. monachus, Wagl. Syst. Av. *Oriolus*, no. 7 (1827) (*nec* Gm.).

O. arundinarius, Burchell, Trav. S. Afr. i. p. 464; W. von Müll. J. f. O. 1855, p. 393.

"*Oriolus chloris*, Cuv." Hartl. Orn. Westafr. p. 81 (1857).

? *O. radiatus*, Gm. S. N. i. p. 384 (1788).

? *O.*, sp. indet., Kirk, Ibis, 1864, p. 318.

O. pileo nigro: speculo alari albo: rectricibus externis ad basin nigris, duabus intermediis olivaceis, duabus proximis ante apicem flavum nigris: major: supra late aureus.

Hab. in Africâ meridionali et in Abyssiniâ (nec in Africâ occidentali).

Adult male. Whole of the head deep glossy black extending down to the breast; nape and sides of the neck rich golden-yellow; whole of the back and scapulars bright yellow, with a slight olive tinge on the latter, and brighter yellow on the rump; wing-coverts black, but so broadly edged with yellow that the black does not show; the outermost cubital coverts edged with grey; the primary coverts black tipped with white, forming a distinct speculum; quills black, the inner web paler, especially in the secondaries; the secondaries broadly edged with yellow on the outer web, those nearest the primaries having also a margin of white, which in the primaries themselves entirely takes the place of the yellow, so that these are edged and tipped with pure white; tail-feathers for the most part yellow, black at the base; as they approach the middle feathers the black colour occupies the most part of the feather, being, however, strongly tinged with olive on those nearest the middle feathers, which are entirely olive-green; under surface of the body brilliant golden-yellow; bill brownish-red; feet black. Total length 9 inches; bill from front 1.1, from gape 1.4; wing 5.4; tail 3.2; tarsus .9; middle toe .8; hind toe .4.

Young male. Similar to the old male, but the colours not nearly so pure, with indistinct brown stripes on the feathers of the upper part of the body; head dusky brown; quills brown, edged exteriorly with lighter brown; breast with black longitudinal markings; tail darker olive-green.

Knysna (*Andersson*), Natal (*Ayres*), Angola (*Monteiro*), North-east Africa (*Heuglin*).

Dr. Hartlaub gives Senegambia as a habitat for this bird on Swainson's authority, and later authors have also assigned this locality for the bird on the same authority; but a careful perusal of the text shows that Swainson only gives a description of it for the sake of comparison with his *O. brachyrhynchus* (B. W. Afr. l. c.).

The *Oriolus radiatus* of Gmelin is very often referred to the

present species, in my opinion very erroneously, as in no stage of plumage can it be said to answer to the following characteristics :—" *alarum tectricibus remigibusque nigris margine albo*" or "*pedes flavi, ungues rubicundi*." The habitat of Gmelin's bird is unknown.

Var. minor.

Oriolus rolleti, Salvadori, Atti R. Accad. Torino, vii. p. 151 : Heugl. Orn. N.-O. Afr. p. 404 (1869).

O. personatus, Heugl. J. f. O. 1867, p. 203 ; 1868, p. 326.

O. brachyrhynchus, Schl. Mus. P.-B. *Coraces*, p. 108 (*nec Swains.*).

O. larvatus, Heuglin, Syst. Uebers. no. 292.

Abyssinia (*Brun-Rollet, Heuglin*), Angola (*Monteiro, Sala*).

In his work on the ornithology of North-eastern Africa, Dr. von Heuglin states that in a letter to him I said that I believed this race to be a distinct species from *O. larvatus* ; but he misunderstood my words. I said that, not having seen an Abyssinian specimen, I could not say for certain, but that I was disinclined to join the two species, because I very much disliked uniting any two species without having personally examined the birds. I, however, wrote to Dr. Finsch on the subject, and he forwarded me the following reply :—

"Of this so-called species I have minutely compared the types in Turin and other specimens, also from the White Nile, in Vienna, and have already expressed my doubts in our work on the ornithology of Eastern Africa (also again in the Appendix). As regards the colours there is, indeed, no difference between it and the South-African *O. larvatus* ; this you may depend upon ; but commonly the measurements are not so large, the bill especially being a little shorter. I should have considered these differences of specific value, but for the fact that there are intermediate forms, which will not allow one to do so. *O. rolleti* is by no means a representative of *O. larvatus* in North-eastern Africa, as there are specimens as small from Angola and in the Leyden Museum from South Africa (*teste Schlegel*). I consider it therefore nothing more than a small race.

	Long. Al.	Caud.	Culm. a fr.	Tarsi.
" <i>O. larvatus</i> , South Africa . .	5 0	3 3	11	12
" Natal	5 1	3 5	11½	11
<i>O. rolleti</i> , Abyssinia	4 11	3 1	10	11
" Angola	4 9	3 0	10½	9
<i>O. baruffii</i> , West Africa . .	4 3	2 7	9½	9

See also the measurements given by Schlegel."

As I have already stated, I have never seen a single specimen from the White Nile*; but having some Angolan specimens now before me, I am able to give a series of measurements showing the difference in size between this and *O. larvatus*.

			Long. tot.	Rostr. Al.	Caud.	Tarsi.	
♂ ad.	Rio Daude, Angola.	Sala.	8	·95	5·1	2·9	·85
ad.	Natal.	Mus. R.B.S.	9	1·1	5·5	3·2	·95
ad.	South Africa.	Mus. R.B.S.	10	1·1	5·5	3·7	·95
juv.	Benguela.	Monteiro.	8·5	·9	5·2	3·1	·9
♂ juv.	Knysna.	Andersson.	9·5	1·1	5·3	3·3	·9
juv.	Natal.	Mus. R.B.S.	9	1	5·2	3·2	·9

I have endeavoured in the above table to compare, as much as possible, individuals of apparently the same age; and the result confirms the conclusion of Dr. Finsch as regards Angolan and South-African birds.

7. ORIOLUS BRACHYRHYNCHUS. (Plate VIII. fig. 1.)

Oriolus brachyrhynchus, Swains. B. W. Afr. ii. p. 35 (1837): Bonap. Consp. Av. i. p. 347 (1850): Hartl. Beitr. Orn. Westafr. p. 24 (1852); J. f. O. 1854, p. 24; Orn. Westafr. p. 81 (1857); J. f. O. 1861, p. 162: W. von Müll. J. f. O. 1855, p. 392: Sharpe, Ibis, 1870, p. 57.

O. pileo nigro: speculo alari albo: rectricibus externis ad basin nigris, quatuor intermediis omnino olivaceis.

Hab. in Africâ occidentali.

* Since the above was written I have seen two examples in the Leyden Museum; and they certainly seemed to agree exactly with the small race from Angola—so far, that is, as I was able to judge without the actual comparison of specimens.

Head glossy black, likewise the throat, extending a little way on to the breast; upper surface of the body deep olive-yellow, brighter yellow on the nape, sides of the neck, and rump; wing-coverts of the same colour as the back, inner cubital coverts edged with olive-yellow, the two or three outer ones edged with grey; primary coverts black, tipped with white, forming a distinct white alar speculum; quills brownish-black, quite white on the inner web, the inner secondaries bright olive-yellow on the outer web, the outer ones grey, with a narrow outer edging of white, primaries edged with white on the outer web; the four middle tail-feathers olive-yellow, the outer ones olive-yellow at the base, bright golden-yellow at the tip preceded by a bar of black; entire under surface rich golden-yellow; bill brownish-red; feet black.

Female or young. The two middle rectrices olive-yellow, the two next with a black bar before the yellow tip.

Sierra Leone (*Swainson*), Fantee (*Mus. R. B. S.*), Gaboon (*Verreaux*).

Oriolus baruffii, Bonap. Consp. Av. i. p. 347 (1850): Hartl. J. f. O. 1854, p. 24: Schl. Mus. P.-B. *Coraces*, p. 109 (1867): Sharpe, Ibis, 1869, p. 383. (Plate VIII. fig. 2.)

Oriolus intermedius, Temm. MS. in Mus. Lugd. (*teste* Hartlaub): Hartl. Beitr. Orn. Westafr. p. 24 (1852, *descr. nulla*); Orn. Westafr. p. 81 (1857) (*descr. orig.*); J. f. O. 1861, p. 163: Cass. Proc. Phil. Acad. 1859, p. 43.

Baruffius intermedius, Bonap. Coll. Delattre p. 74 (*fide* Hartlaub).

Head deep black, likewise the throat, extending a little way on to the breast; upper surface of the body olive-yellow, brighter on the nape, sides of the neck, and rump; wing-coverts of the same colour as the back; inner cubital coverts edged with olive-yellow, the outer ones edged with grey; the primary coverts black tipped with white, forming a distinct alar speculum; quills black, white underneath on the inner web; inner secondaries olive-yellow on the outer web, the outer ones edged with light grey, the primaries edged with white; the two middle tail-

feathers olive, all the others olive at the base, bright yellow at the tip, preceded by a black bar; under surface of the body rich golden yellow; bill brownish-red; feet black.

Gaboon, Moonda River, and Camma river (*Du Chaillu*), Ashantee (*Pel*), Fantee (*Mus. R. B. S.*).

I have kept the synonymy of these two birds separate, but I believe there ought not to be the slightest doubt of their identity. I have a specimen of *O. baruffii*, from Fantee, exactly agreeing with the descriptions of Bonaparte and Dr. Hartlaub; and, again, I have another specimen from the same country exactly agreeing with Swainson's *O. brachyrhynchus*. The only difference exists in the tail-feathers. In the latter bird the four middle tail-feathers are olive-yellow, while in *O. baruffii* the two middle feathers only are olive-yellow, the two next on each side having a black bar before the tip. This character might be sufficient to separate them specifically, but for the fact that this bar seems to disappear gradually. I have seen in Lord Walden's collection a specimen of *O. baruffii* obtained from M. Du Chaillu, where the black bar is uneven and interrupted in the middle by a dash of olive-yellow, and is evidently gradually disappearing. I will not, however, positively unite them, although, as will be seen by my refusing *O. baruffii* a place in my table of species, I do not for a moment believe it to be really distinct from *O. brachyrhynchus*; but I should like to be certain what stage of plumage it represents in that species. Any future ornithologist, when the question is decided, can easily add the list of synonyms of *O. baruffii* given by me above to those of *O. brachyrhynchus*. Both descriptions are from Fantee specimens, from which also the figures of the plate are drawn.

8. *ORIOLOUS NIGRIPENNIS*. (Plate VII. fig. 1.)

Oriolus nigripennis, Verr. J. f. O. 1855, p. 105: Hartl. Orn. Westafr. p. 85 (1857): Cass. Proc. Ac. N. S. Philad. 1859, p. 43: Hartl. J. f. O. 1861, p. 183: Sharpe, Ibis, 1870, p. 56.

O. pileo nigro: speculo alari albo nullo.

Hab. in Africâ occidentali.

Entire head, throat, and upper part of the breast deep glossy-

black ; back golden green, pure yellow on the nape and sides of the neck, and brighter yellow on the rump ; wing-coverts blackish, broadly edged with olive-yellow ; quills black, paler on the underside, the secondaries edged with olive-yellow, primaries edged with white towards the tip ; middle tail-feathers deep glossy-black with a very narrow yellow edging at the tip, the other feathers black at the base, the outer ones for the most part yellow and the inner ones for the most part black, those nearest the middle having most of the latter colour ; under surface of the body very rich golden-yellow ; bill brownish-red ; feet black.

Gaboon (*Verreaux*), Camma River (*Cassin*), Fantec (*Mus. R. B. S.*), Sierra Leone (*Mus. Walden*).

The absence of the white alar speculum seems to be the distinguishing character of the present species. I have examined the type-specimens which are in the British Museum, and subjoin their measurements along with those of two other specimens now lying before me.

		Long. tot.	Alæ.	Caudæ.	Rostr.
1 (Type).	Gaboon.	8	4·4	3	·9
2 (Type).	„	8·5	4·7	3	·95
3.	Fantee.	8	4·4	2·6	·95
4.	Sierra Leone.	7·5	4·4	2·5	·8

Dr. Finsch considers this species to be identical with *O. baruffi*, from which, however, it differs perceptibly in having no white alar speculum, and also in having the tail-feathers blackish, faint olive-yellow only near the base. The presence of this colour may indicate that in time the whole of the rectrices will become olive-yellow. If this is proved to be the case ultimately, Dr. Finsch's supposition may be right ; and in that case *O. nigripennis* will be the young, *O. baruffi* the intermediate stage, and *O. brachyrhynchus* the old of one and the same species. I confess that I should not be surprised at this ; and another fact may be mentioned in favour of their identity, namely that they all three inhabit the same localities, specimens of each having been obtained at all the collecting-points from Sierra Leone southwards to Gaboon.



YELLOW-BILLED CUCKOO (C. FLAVUS)



23

Black-headed Yellow-green Bird

Ptilinopus melanotis

Black-headed Yellow-green Bird. Ptilinopus melanotis.